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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/631,865

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Fumihito Imai

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02/28/2006

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EXAMINER

WATKO, JULIE ANNE

ART UNIT

PAPER NUMBER

2653

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/631,865

Applicant(s)

IMAI, FUMIHITO

Examiner

Julie Anne Watko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-11 is/are allowed.
- 6) ☒ Claim(s) 2-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings were received on February 10, 2006. These drawings are acceptable.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schick '849 (US Pat. No. 6172849 B1).

As recited in claim 2, Schick '849 shows a disk cartridge 10 in which a discoid recording medium 14 is rotatably contained in a housing (18a and 18b) and which is inserted (see Fig. 7) into slot formed in a disk drive to be placed in the disk drive, wherein the housing includes an opening 13 for a read/write head of the disk drive to access a surface of the recording medium, rotary shutter 16 for opening/closing the opening, and shutter locking means for locking the rotary shutter at closed position, the rotary shutter is constituted so that a lock on the rotary shutter is released by lock releasing means (including 48; see col. 4, lines 37-38, "shaft portion 34b flexibly releases shutter 16 when a rotational force is applied to the shutter 16") and shutter opening means (including 48) provided in the disk drive when inserting the disk cartridge into the disk drive, and the rotary shutter is rotated to an open position (see Fig. 8), and the rotary shutter is constituted to be led to the closed position (by 48a; see col. 5, lines 17-23) when ejecting the disk cartridge from the disk drive by the force of ejection.

As recited in claim 2, Schick '849 shows that the shutter locking means comprises: a shutter locking member 34 having a convex engaging portion 36 which can engage (see Fig. 6)

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with a concave engaging portion 16d formed on a periphery of the rotary shutter 16, and rotatably provided between a shutter locking position where the convex engaging portion engages with the concave engaging portion and a lock releasing position (see dashed line in Fig. 6) where the convex engaging portion is escaped from the concave engaging portion in the housing.

As recited in claim 2, Schick '849 does not explicitly show a spring member which urges the shutter locking member toward the shutter locking position; however, it is clear from the reference that 34 is made from a springy material.

Separation and integration of parts within the level of ordinary skill in the art does not give rise to patentability, absent unexpected results due to the separation or integration. See, e.g., In re Larson, 144 USPQ 347 (CCPA1965).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a spring member in lieu of providing a springy shutter locking member. The rationale is as follows: one of ordinary skill in the art would have been motivated to separately optimize part materials for elasticity, weight, cost and durability as is notoriously well known in the art.

2. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schick '849 (US Pat. No. 6172849 B1) as applied to claim 2 above, and further in view of Schick et al '067 (US Pat. No. 6178067 B1).

Schick '849 shows a cartridge as described above for claims 1-2.

As recited in claim 3, Schick '849 is silent regarding a lock releasing member which engages the shutter locking member when inserting the disk cartridge into the disk drive and

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rotates the shutter locking member from the shutter locking position to the lock releasing position by resisting urging force of the spring member.

As recited in claim 3, Schick et al '067 show a lock releasing member 51 which engages the shutter locking member when inserting (see Figs. 10A-B) the disk cartridge into the disk drive and rotates the shutter locking member 37 from the shutter locking position to the lock releasing position by resisting urging force of a spring member 37d (see Figs. 7A-B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to engage the shutter locking member of Schick '849 with a shutter locking member as taught by Schick et al '067. The rationale is as follows: one of ordinary skill in the art would have been motivated to unlock and open the shutter so as to prepare for the read/write heads to access the media as taught by Schick et al '067.

Schick '849 shows a cartridge as described above for claims 1-3.

As recited in claim 4, Schick '849 is silent regarding whether an arcuate groove which is concentric with the rotary shutter is formed in the housing of the disk cartridge, and a shutter knob which protrudes from the arcuate groove and can move along the arcuate groove is attached to the rotary shutter, and the shutter opening means provided in the disk drive is constituted of an engaging wall which engages with the shutter knob of the rotary shutter released by the lock releasing means when inserting the disk cartridge into the disk drive and rotates the rotary shutter to the open position.

As recited in claim 4, Schick et al '067 shows that an arcuate groove 35 which is concentric with the rotary shutter is formed in the housing of the disk cartridge, and a shutter knob 17 which protrudes from the arcuate groove and can move along the arcuate groove is

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attached to the rotary shutter, and the shutter opening means provided in the disk drive is constituted of an engaging wall (part of frame 50; see col. 5, lines 30-39, "the projection operates by impinging upon the cartridge insertion opening of drive 50 as cartridge 10 is inserted into drive 50. Because projection 17 extends beyond the general thickness of cartridge 10, projection 17 cannot fit through the narrow drive opening. Accordingly, as a cartridge 10 is forced into drive 50, projection 17 impinges on the frame of drive 50 and thereby drags shutter 16 to an open position") which engages with the shutter knob of the rotary shutter released by the lock releasing means when inserting the disk cartridge into the disk drive and rotates the rotary shutter to the open position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the arcuate groove and knob of Schick et al '067 to the cartridge of Schick '849 as taught by Schick et al '067. The rationale is as follows: one of ordinary skill in the art would have been motivated to add the knob and groove to the cartridge in order to drag the shutter to an open position as taught by Schick et al '067.

Allowable Subject Matter

3. Claims 5-11 are allowed.
4. See reasons for indicating allowable subject matter stated in the office action mailed November 10, 2005.

Response to Arguments

5. Applicant's arguments filed February 10, 2006, have been fully considered but they are not persuasive.

On pages 9-10, Applicant argues that Schick '849 teaches away from the spring member of the claimed invention insofar as Schick '849 discloses that a shutter without a spring member is advantageous, such that "one of ordinary skill in the art would not modify the cartridge disclosed in the '849 patent to add a spring to close the shutter -- this is directly contrary to the clear and express teachings of the '849 patent and is, indeed, the very thing the '849 patent teaches should be avoided." It is noted by the Examiner that Applicant's argument is drawn to "a spring to close the **shutter**" (see page 9, last line-page 10, 1st line, emphasis added), whereas independent claim 2 recites "a spring member which urges the **shutter locking member** toward the shutter locking position" (see the last 2 lines, emphasis added). Thus, Applicant's argument is moot.

It is further noted by the Examiner that "A known or obvious [product] does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." In re Gurley, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Thus, even if Applicant were to identify some disclosure of advantage of a one-piece springy shutter locking member over separate spring member and shutter locking member, such advantage would not render the separation non-obvious. Separation and integration of parts within the level of ordinary skill in the art does not give rise to patentability, absent unexpected results due to the separation or integration. See, e.g., In re Larson, 144 USPQ 347 (CCPA1965). It is noted by the Examiner that Applicant has failed to show evidence of unexpected results due to separation of the spring member and shutter locking member.

Moreover, Applicant's argument that "a statement by the Examiner that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the

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art” at the time the claimed invention was made because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references” is moot with respect to independent claim 2. The Examiner has made an obviousness argument based on a single reference, and has not combined the teachings of Schick ‘849 with any other reference.

It is noted by the Examiner that Applicant has failed to challenge the Examiner’s stated motivation for separating the unified parts disclosed by Schick ‘849.

The claims are obvious as stated in the rejection, which is maintained and made final.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (571) 272-7597. The examiner can normally be reached on T11A-5P W3P-9P Th11:30A-10P F10A-8:30P SatNoon-8:30P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Julie Anne Watko
Primary Examiner
Art Unit 2653

February 22, 2006
JAW

A handwritten signature in black ink, appearing to read 'Julie Anne Watko', is written over the printed name and title.